



#### 4.2.13 Santa Cruz County

##### Geography

Santa Cruz County is located in south central Arizona and encompasses 1,236 square miles. The characteristics of the County are quite diverse, ranging from the gradually sloping riparian corridor of the Santa Cruz River Valley with its adjoining agricultural areas, to the steeply inclined pine-oak forests located on Mount Wrightson and other parts of the Santa Rita and Patagonia mountains. The two ecoregions of the County offer the Desert with elevations of 3,000 to 4,000, hot and dry summers and mild to cool winters and the Forest with elevations above 5,000, cool summers and cold winters.

##### Population

The County's population in 2005 was 44,055. The resident population grew at a rate of 29.3% between 1990 and 2000, which is somewhat less than the State's overall growth of 40% during the same period. The towns of Nogales, Patagonia, and unincorporated Rio Rico and Tubac are the only communities in the County. Population estimates and projections for these communities are also provided below. Nogales is the County seat and also includes the highest population in the County. All of the communities are expected to grow moderately, with Nogales being the only community to show substantial population gains in the coming decades.

Santa Cruz County Population, 1990-2040							
Jurisdiction	1990	2000	2005	2010	2020	2030	2040
Santa Cruz County	29,676	38,381	44,055	50,210	61,658	71,033	78,526
Nogales	19,489	20,878	21,830	24,282	27,782	31,059	33,929
Patagonia	888	881	920	1,022	1,033	1,071	1,138
Note: Figures for 1990, 2000, 2005 from Arizona Dept. of Commerce. Figures for 2010-2040 from AZ DES (projections date from 1997).							
Source: Arizona Department of Commerce, May 2003; Arizona Department of Economic Security, February 1997.							

##### Economy & Labor Force

The County major industries for the labor force of 15,973 include transportation, service (i.e. tourism), manufacturing, public administration and retail/wholesale trade. The unemployment rate for 2005 was 9%, which is nearly double that of the State's overall rate of 4.6% for the same period.

##### Historic Hazard Events

During the development of the original State of Arizona All-Hazard Mitigation Plan, a list of historic hazard events was compiled. Most counties researched local records and governmental databases to update and add records of recent hazards to the state compiled list for use in their plans. Additional hazard records were researched using the same criteria, with the exception that all damages greater than \$1 were included. Therefore, due to the variety of data sources and criteria, it should be kept in mind that the numbers reported reflect the availability of such data from those sources and the numbers are expected to under-predict the losses actually sustained over the past 30 to 40 years. A more thorough search for historic data in future planning efforts is mentioned in the county plans and encouraged by ADEM.

It is our hope that this data coupled with other risk assessment information will prove to be instrumental in assisting the County and State in future planning and mitigation efforts. We believe this can happen by this data accurately indicating which hazards we are most susceptible to; how damaging these hazards can be to us; and the damage costs or costs avoided through future mitigation projects.

Historic Record of Disaster Events in Santa Cruz County								
Event Type	Statewide or Multiple County, Incl Santa Cruz				Substantially Santa Cruz			
	Total	Fatalities	Injuries	Loss \$	Total	Fatalities	Injuries	Loss \$
Drought	67	0	0	300,000,000	0	0	0	0
Earthquake	0	0	0	0	1	0	0	0
Flooding/Flash Flooding	11	56	1,091	1,301,122,000	33	8	5	1,847,000
Haz Mat Incidents	3	0	0	0	14	0	20	0
ThundStorms/Hi Winds	2	0	0	4,400,000	31	0	2	502,000
Tornadoes/Dust Devils	0	0	0	0	1	0	0	0
Wildfire	16	0	0	0	29	0	13	90,000
Winter Storms	2	0	0	0	7	0	0	0
Note: "Statewide or Multiple County, Incl Santa Cruz" events met the 1 or more of the following criteria: at least 1 injury and/or fatality or Historical Significance. All had at least \$50,000 in reported Losses. "Substantially Santa Cruz" events met 1 or more of the following criteria: at least 1 reported injury and/or fatality or Historical Significance. No minimum dollar amount for Losses was used. All information is derived from the best data available at the time.								
Source: Santa Cruz County Multi-Hazard Mitigation Plan, FEMA Approved March 2006.								



## Vulnerability

The County has a very small number but modest proportion of population that is potentially vulnerable to hazards due to a relatively young resident base with 32% of its population less than 18 years of age, but only 11.7% over 65.

Santa Cruz County Populations Potentially Vulnerable to Hazards, 2005				
Jurisdiction	Population			
	Total	Under 18 yrs	65+ years	Below Poverty Level
Arizona	6,044,985	1,607,966	773,758	840,253
Santa Cruz County	44,055	14,098	5,154	8,459
As a % of County	100%	32%	11.7%	19.2%
As a % of State	.73%	.88%	.67%	1%

Source: Estimates based on US Census Bureau data, 2007. Poverty Level as defined by US Census Bureau.

Santa Cruz County Dwelling Units Potentially Vulnerable to Hazards, 2005		
Jurisdiction	Housing Units	
	Total	Built Before 1970
Arizona	2,544,806	490,710
Santa Cruz County	15,459	3,760

Source: Estimates based on US Census Bureau. Data, 2007.

## Hazards & Mitigation Strategy

Using the results of the County's vulnerability and capability analysis and the goals and objectives, a list of actions/projects was formulated. The actions/projects were then evaluated and ranked using the STAPLEE procedure. Below are the top ranking identified hazards and their actions/projects as indicated in the County's Hazard Mitigation Plan approved by FEMA on March 23, 2006:

### Drought

Action 1: Development of drought mitigation plan for Santa Cruz County as directed by the Governor's Drought Mitigation Task Force.

### Flooding/Flash Flooding

Action 1: The Sheriff's Office/Comm Center (SOCC) is currently located within the floodplain of Nogales Wash and has sustained repeated damages and flooding in the past. The SOCC is also exposed to significant HAZMAT hazards due to the location of the railroad. This project will relocate the SOCC to the current County facility complex on North Congress.

Action 2: Develop and implement a system of record keeping, both electronic and hard copy, to conform with all Federal and State requirements, with appropriate documents accessible to the GIS and Public.

### Wildfires

Action 1: Develop Fire Wise programs for neighborhoods and homeowners associations within the wildland fire/urban interface including instruction materials.

## Mitigation Strategy Progress

Through development of this Plan, the need to significantly refine the goals/objectives and actions/projects in our original Plan was evident. We believe this need is a result of the determination to focus the Plan more on natural caused hazards as other hazards are covered in their appropriate plans (i.e. health, terrorism, etc.). There is also much to be said about the increased amount of information available regarding hazard mitigation planning.

To encourage our jurisdictions to re-evaluate their Plan's Mitigation Strategy as well, each County was asked to indicate their action/project progress since the development of their Plan.

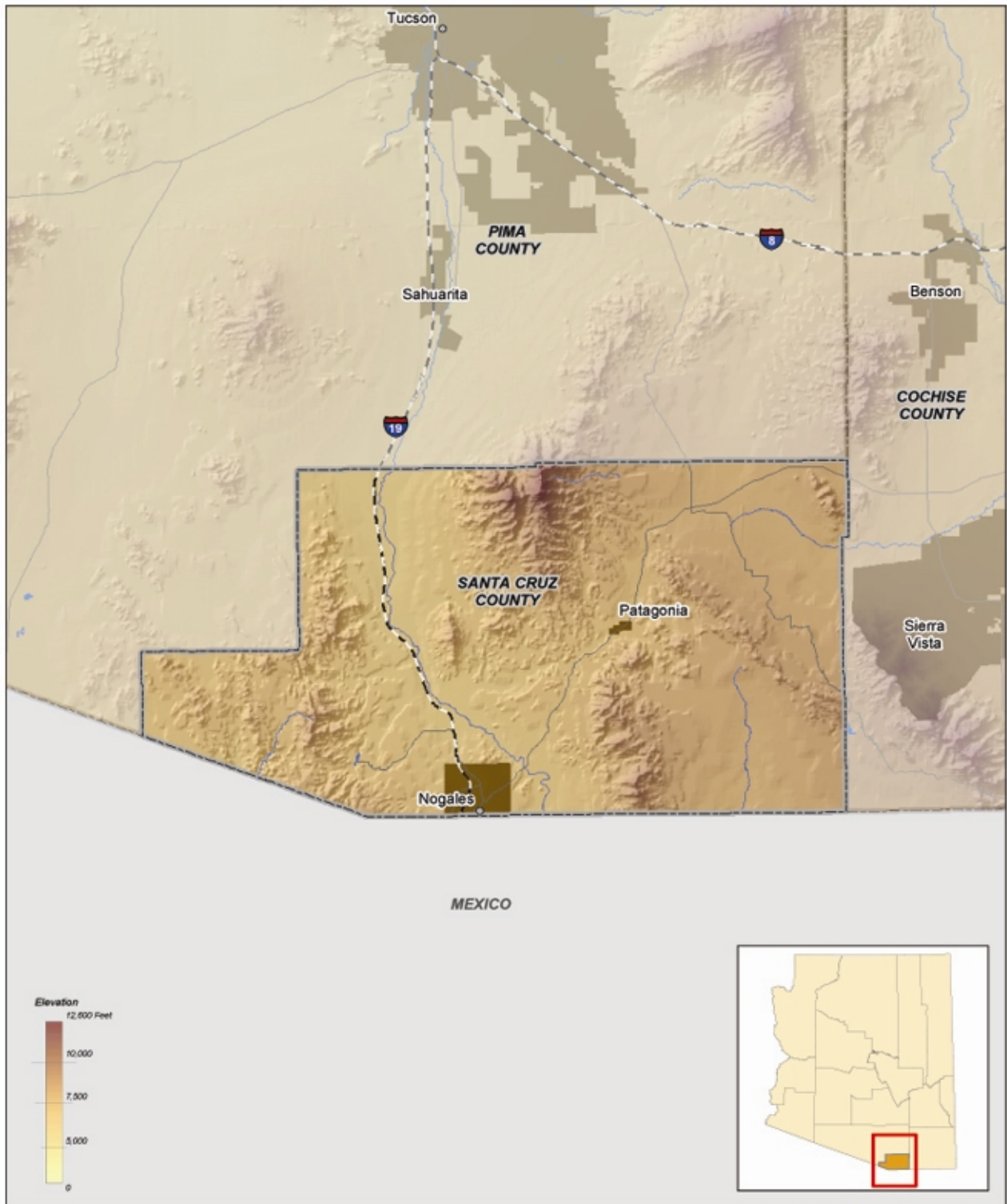
No information was provided by the County.

## Other Planning Mechanisms

During their planning process, the County staff reviewed and evaluated their resources and capabilities in the areas of Existing Plans, Policies and Ordinances; Technical Staff/Resources and Financial Resources. Although all resources are important to a community's ability to mitigate the effects of natural and human-caused hazards, we elected to ask the County to complete a survey indicating their legal and regulatory resources to be included in the Plan. We are pleased to receive feedback that reflects awareness of the need for regulations and guidelines that may have an effect on loss reduction. We believe such resources and capabilities can play a critical part in developing and maintaining a more disaster resistant community. The information below was provided by the County in June 2007:



Plan/Policy/Ordinance	Yes or No	Approval Date	Authority	Plan Use/Comments
Building Code	Y	11/2004		Adopted International & Uniform Codes
Zoning Ordinance	Y	1973		
Subdivision Ordinance or Regulations	Y	2/2005		
Special Purpose Ordinance	Y	5/2001		County Floodplain & Erosion Hazard Mgmt Ordinance
Growth Management Ordinance	N			Comprehensive Plan has a Growth Area Element
Site Plan Review Requirements	Y			Staff review prior to issuance of building permits.
General or Comprehensive Plan	Y	6/2004		
Capital Improvement Plan	Y	9/2002		
Other	Y			2000 Unified Santa Cruz County/Nogales Transportation Plan
Source: Survey from ADEM to County Emergency Managers, 2007.				



#### LEGEND

- Interstate
- Highway
- City
- Major Stream
- County
- Lake
- County Seat



State of Arizona  
Multi-Hazard Mitigation Plan

### Map 15 Major Features of Santa Cruz County